

DIRECT TESTIMONY OF

GEORGE A. LIPPARD, III

ON BEHALF OF

DOMINION ENERGY SOUTH CAROLINA, INC.

DOCKET NO. 2020-2-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION WITHIN DOMINION ENERGY SOUTH CAROLINA, INC. (“DESC” OR “COMPANY”).

A. My name is George A. Lippard, III. My business address is Post Office Box 88, Jenkinsville, South Carolina 29065. I am the Site Vice President of the Virgil C. Summer Nuclear Station (“VCSNS” or “V.C. Summer”) for Dominion Energy South Carolina, Inc. (“DESC” or the “Company”).

Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND YOUR BUSINESS EXPERIENCE.

A. I earned a Bachelor of Science degree in Mechanical Engineering from Clemson University in 1979 and a Master of Business Administration degree from the University of South Carolina in 1982. I joined DESC, then South Carolina Electric & Gas Company, in 1983 as a Nuclear Training Instructor at VCSNS. I received a Senior Reactor Operator Certification in 1986 and a Senior Reactor Operator License in 1992 from the United States Nuclear Regulatory Commission

1 (“NRC”). Since joining the Company, I have held positions in the Operations,
2 Outage Management, Licensing, and Training organizations at V.C. Summer. I
3 have also served in the leadership roles of Operations Manager and Plant General
4 Manager at VCSNS. On January 30, 2016, I was promoted to Vice-President of
5 Nuclear Operations for Unit 1. Effective January 1, 2019, my title changed to Site
6 Vice President of the VCSNS as a result of the merger of Dominion Energy, Inc.
7 and SCANA Corporation.
8

9 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

10 A. The purpose of my testimony is to review the operating performance of
11 VCSNS during the period from January 1, 2019, through December 31, 2019
12 (“Review Period”).
13

14 **Q. WHAT ARE DESC’S OBJECTIVES IN THE OPERATION OF VCSNS?**

15 A. DESC’s primary objective at VCSNS is safe and efficient operation. The
16 Company also strives for excellence in all phases of operation of the facility. The
17 station’s key focus areas of safety, reliability, outage and work management, work
18 force development, and organizational effectiveness constitute the Company’s core
19 business plan elements. DESC’s constant improvement in these areas over the
20 years has facilitated VCSNS’s outstanding service record. Furthermore, DESC’s
21 business objectives are focused on maintaining a competitive production cost for
22 the generation of electricity using nuclear fuel.

1 **Q. WHAT HAS BEEN THE COMPANY'S EXPERIENCE WITH THE**
2 **PERFORMANCE OF THE VCSNS?**

3 A. VCSNS performed well during the Review Period. DESC continuously
4 meets or exceeds all NRC requirements and Institute of Nuclear Power Operations
5 ("INPO") standards. Consistent with the provisions of Section 58-27-865 of the
6 South Carolina Code of Laws Annotated, as amended, V.C. Summer's net capacity
7 factor based on reasonable excludable nuclear system reductions during the Review
8 Period was 101.78%, and the gross generation output was 8,581,185 megawatt
9 hours.

10
11 **Q. PLEASE EXPLAIN THE ROLES OF INPO AND THE NRC WITHIN THE**
12 **NUCLEAR INDUSTRY AND DESCRIBE ANY RANKINGS RECEIVED**
13 **BY VCSNS FROM THOSE AGENCIES.**

14 A. INPO is a nonprofit corporation established by the nuclear industry to
15 promote the highest levels of nuclear safety and plant reliability. INPO promotes
16 excellence in the industry in the operation of nuclear electric generating plants. In
17 2018, INPO rated VCSNS's overall performance as strong. At the time of the
18 filing of this testimony, INPO is currently conducting its next performance-based
19 evaluation of VCSNS. Should VCSNS's overall performance rating change as a
20 result of this evaluation, the Company will update the Commission at the hearing
21 in this matter.

1 The NRC is responsible for the licensing and oversight of the civilian use of
2 nuclear materials in the United States. During the Review Period, the NRC
3 reported that VCSNS operated in a manner that preserved public health and safety
4 and fully met all cornerstone objectives.

5
6 **Q. DID VCSNS EXPERIENCE ANY UNPLANNED OUTAGES DURING THE**
7 **REVIEW PERIOD?**

8 A. Yes. During the Review Period, VCSNS experienced two mid-cycle
9 maintenance outages, which I explain in further detail below.

10 **Mid-Cycle Outage No. 1.** VCSNS has four reactor building cooling fans,
11 only three of which are required for normal operations. In early November, with
12 one reactor building cooling fan already experiencing mechanical problems, a
13 second reactor building cooling fan experienced mechanical problems, requiring
14 that the Unit come offline within seven days. On November 7, 2019, at 3:36 a.m.,
15 the Company opened the generator breaker at V.C. Summer Station to begin the
16 maintenance outage. An inspection of the fans determined that one had a single
17 blade damaged and one had three blades damaged. The fan with one damaged
18 blade was repaired, and the outage ended with the closure of the generator breaker
19 on November 20, 2019, at 1:17 p.m. The remaining inoperable reactor building
20 cooling fan will be repaired during the next refueling outage. Each of the three
21 reactor building cooling fans currently in service has had a complete replacement
22 of all fan blades.

1 During the outage, the Company also repaired a very small leak on a primary
2 system check valve in the reactor coolant system, which the Company had been
3 monitoring for several months.

4 **Mid-Cycle Outage No. 2.** On November 28, 2019, at 3:27 p.m., the
5 Company opened the main generator breaker and brought VCSNS offline to safely
6 repair a non-radioactive steam leak inside the reactor building. The leak was
7 located on a 3/8-inch instrument line associated with a steam generator level
8 transmitter at a welded connection and was repaired. The outage ended with the
9 closure of the generator breaker on November 30, 2019, at 3:28 a.m.

10
11 **Q. DID VCSNS EXPERIENCE ANY PLANNED OUTAGES DURING THE**
12 **REVIEW PERIOD?**

13 A. No.

14
15 **Q. WHEN WILL THE NEXT REFUELING OUTAGE OCCUR?**

16 A. DESC's next refueling outage, Refueling Outage No. 25 ("RF25"), is
17 scheduled for Spring 2020. Refueling outages are scheduled every 18 months to
18 replace depleted fuel assemblies. Maintenance and testing that cannot be done with
19 the plant on-line are also conducted during the refueling outage.

1 **Q. WHAT IS THE USED FUEL STORAGE CAPABILITY FOR VCSNS?**

2 A. V.C. Summer's used fuel storage capability consists of a spent fuel pool,
3 which is equipped with storage racks designed to hold fuel assemblies removed
4 from the reactor, and a dry cask storage facility, which was placed in service in
5 January 2016. Together, DESC's fuel storage capability has been designed to
6 accommodate storage of all fuel used for the life of the plant. During the Review
7 Period, the Company transferred used fuel from the spent fuel pool to the dry cask
8 storage facility in Spring 2019. The next such transfer is scheduled for 2022.

9
10 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

11 A. Yes.